Application No. 10/583,689 Attorney Docket No.: 030863.00011

## **Amendments to the Claims**:

- 1-8. (Cancelled).
- 9. (Currently Amended) The compound according to <u>Claim</u> 30 or a tautomer, salt, stereoisomer thereof or mixture thereof in any ratio in which R<sup>6</sup> is one of the following:

10-13. (Cancelled).

14. (Withdrawn) A method for preparing the compound according to Claim 30 or a salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, comprising that a compound of formula II

$$R^1$$
 $R^3$ 
 $NH_2$ 

in which R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> have the meanings indicated in Claim 30,

is reacted with a compound of the formula III

in which

R<sup>6</sup> has the meaning indicated in Claim 30,

and

with a compound of the formula IV, the double-bond isomer thereof (E isomer) or mixtures thereof

$$R^4$$
  $R^5$  IV

in which R<sup>4</sup> and R<sup>5</sup> have the meanings indicated in Claim 30,

and, optionally, a radical  $R^7$  which denotes H is converted into a radical  $R^7$  which has a meaning other than H,

and/or, optionally,

a base or acid of the formula I is converted into one of its salts.

- 15. (Withdrawn) The method according to Claim 14, wherein the reaction is carried out in presence of a protonic acid or Lewis acid.
- 16. (Withdrawn) The method according to Claim 14, wherein the reaction is carried out in presence of trifluoroacetic acid, hexafluoroisopropanol, bismuth(III) chloride, ytterbium(III) triflate, scandium(III) triflate or cerium(IV) ammonium nitrate.

17-29 (Cancelled).

30. (Previously presented) A compound of formula IA4

$$R^{1}$$
 $R^{3}$ 
 $R^{2}$ 
 $R^{6}$ 
 $R^{6}$ 
 $R^{6}$ 

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in which

R<sup>1</sup> is A, CF<sub>3</sub>, OCF<sub>3</sub>, SA, SCN, CH<sub>2</sub>CN, -OCOA, Hal, or SCF<sub>3</sub>,

 $R^2$  is F or H,

 $R^3$  is H,

R<sup>a</sup> is NHR, NR<sub>2</sub>,

$$(CH_{2})_{n} - [X(CH_{2})_{n}]_{m} - N$$

$$(CH_2)_n$$
  $[X(CH_2)_n]_m$   $N$   $N$ 

OR, NHR, NR<sub>2</sub>, NR(CH<sub>2</sub>)<sub>n</sub>-aryl, NR(CH<sub>2</sub>)<sub>n</sub>OR, COOR, OCOR, NR(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N[(CH<sub>2</sub>)<sub>n</sub>NHCOOR]CO-aryl, N[CH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>OR]<sub>2</sub>, NR(CH<sub>2</sub>)<sub>n</sub>X(CH<sub>2</sub>)<sub>n</sub>OH, O(CO)NR(CH<sub>2</sub>)<sub>n</sub>OR, O(CO)(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N(R)(CH<sub>2</sub>)<sub>n</sub>N(R)COOR, OSO<sub>2</sub>A, OCH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, Hal, NCOOR, N(CH<sub>2</sub>)<sub>n</sub>CONR<sub>2</sub>, XCONR(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, N[(CH<sub>2</sub>)<sub>n</sub>XCOOR]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>X-aryl, or N[(CH<sub>2</sub>)<sub>n</sub>XR]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-aryl,

aryl

is phenyl, naphthyl or biphenyl, each of which is unsubstituted or mono-, di- or trisubstituted by Hal, A, OH, OA, NH<sub>2</sub>, NO<sub>2</sub>, CN, COOH, COOA, CONH<sub>2</sub>, NHCOA, NHCONH<sub>2</sub>, NHSO<sub>2</sub>A, CHO, COA, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>A, -CH<sub>2</sub>-COOH or -OCH<sub>2</sub>-COOH,

R

is H or A, in case of geminal radicals R is– $(CH_2)_5$ -, - $(CH_2)_4$ -, -  $(CH_2)_2$ -X- $(CH_2)_2$  or – $(CH_2)_2$ -Z- $(CH_2)_n$ ,

A is alkyl or cycloalkyl, i	in which one or more H atoms are
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optionally replaced by Hal,

Hal is F or Cl,

X is O, S or NR,

$$Z \hspace{1cm} \text{is X, CHCONH}_2, \hspace{1cm} \text{NCO, CH(CH}_2)_n \text{COOR, NCOOR,} \\$$

 $N(CH_2)_nOH,\ CHNH_{2,}\ C(OH)R,\ CHNCOR,\ N(CH_2)_nCOOR,$ 

 $CH(CH_2)_nX(CH_2)_n\text{-aryl},$ 

R<sup>6</sup> is phenyl, 2-, 3- or 4-pyridyl, pyrimidyl, furyl or thienyl, each

of which is unsubstituted or mono- or polysubstituted by Hal,

NO2, CN, OH, CF3, OCH(CF3)2, OCOCH3 or A,

 $R^7$  is H or A,

m is 0, 1 or 2 and

n is 0,1,2,3,4,5,6 or 7

or a tautomer, salt, stereoisomer thereof or mixture therefore in any ratio.

31. (Previously presented) The compound of claim 30 of the following formula or a tautomer, salt, stereoisomer thereof or a mixture thereof in any ratio:

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- 32. (Previously presented) The compound according to Claim 30, or a tautomer, salt, stereoisomer thereof or mixture thereof in any ratio, in which alkyl is methyl.
- 33. (Previously presented) The compound according to Claim 30 or a tautomer, salt, stereoisomer thereof or mixture thereof in any ratio in which

$$R^7$$
 is H.

- 34. (Previously presented) The compound according to Claim 30 or a salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, or optionally an excipient and/or an adjuvant, in a pharmaceutical composition.
- 35. (Withdrawn) A mixture comprising the compound according to Claim 30 or a tautomer, salt, stereoisomer thereof or mixture thereof in any ratio and a compound of formula V, or an analogue thereof or metabolite thereof

$$R^{11}$$
  $Y'$   $(CH_2)_p$   $Z'$   $R^9$ 

in which

Y' and Z' each, independently of one another, are O or N,  $R^9$  and  $R^{10}$  each, independently of one another, are H, OH, halogen, OC1-10-alkyl, OCF<sub>3</sub>, NO<sub>2</sub> or NH<sub>2</sub>, p is an integer between 2 and 6 inclusively, and  $R^8$  and  $R^{11}$  are each, independently of one another, in the meta- or para-position and are selected from the group consisting of:

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- 36. (Withdrawn) The mixture according to Claim 35, wherein the compound of formula V is pentamidine or a salt thereof.
- 37. (Withdrawn) A method comprising, administering to a patient the compound according to Claim 30 or a salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of disease which can be influenced by the inhibition, regulation and/or modulation of mitotic motor protein Eg5.
- 38. (Withdrawn) A method comprising administering to a patient the compound according to Claim 30, or a tautomer, stereoisomer thereof or mixture thereof in any ratio for treatment and prophylaxis of cancer.
- 39. (Withdrawn) The method according to Claim 38, where the cancer is associated with squamous epithelium, bladder, stomach, kidneys, head and neck, oesophagus, cervix, thyroid, intestine, liver, brain, prostate, urogenital tract, lymphatic system, stomach, larynx and/or lung.
- 40. (Withdrawn) The method according to Claim 39, where the cancer originates from monocytic leukaemia, lung adenocarcinoma, small-cell

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lung carcinoma, pancreatic cancer, glioblastomas and breast carcinoma and colon carcinoma.

- 41. (Withdrawn) The method according to Claim 38, where the cancer to be treated is of blood and immune system.
- 42. (Withdrawn) The method according to Claim 41, where the cancer originates from acute myelotic leukaemia, chronic myelotic leukaemia, acute lymphatic leukaemia and/or chronic lymphatic leukaemia.
- 43. (Withdrawn) The method comprising administering to a patient a therapeutically effective amount of the compound according to Claim 30 or a salt, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of cancer in combination with a therapeutically effective amount of a compound of the formula V, or an analogue thereof and/or a metabolite thereof.

$$R^{11}$$
  $Y'$   $(CH_2)_p$   $z'$   $R^8$ 

in which

Y' and Z' each, independently of one another, are O or N,  $R^9$  and  $R^{10}$  each, independently of one another, are H, OH, halogen, OC1-10-alkyl, OCF<sub>3</sub>, NO<sub>2</sub> or NH<sub>2</sub>, p is an integer between 2 and 6 inclusively, and  $R^8$  and  $R^{11}$  are each, independently of one another, in the meta- or para-position and are selected from the group consisting of:

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## where

the compound of the formula V and the compound of the formula V, or analogue thereof and/or metabolites thereof are administered simultaneously or within 14 days of one another in amounts which are sufficient to inhibit the growth of a tumour or of other hyperproliferative cells.

- 44. (Withdrawn) The method according to Claim 43, wherein the compound of the formula V used is pentamidine or a salt thereof.
- 45. (Withdrawn) The method comprising administering to a patient the compound according to Claim 30 or a salt, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of tumours where a therapeutically effective amount of the compound according to Claim 30 is administered in combination with radiotherapy or a compound selected from the group consisting of 1) an oestrogen receptor modulator, 2) an androgen receptor modulator, 3) a retinoid receptor modulator, 4) a cytotoxic agent, 5) an antiproliferative agent, 6) a prenyl-protein transferase inhibitor, 7) an HMG-CoA reductase inhibitor, 8) an HIV protease inhibitor, 9) a reverse transcriptase inhibitor and 10) an angiogenesis inhibitors.

46. (Currently Amended) The compound according to Claim 30 of the subformulae I13 or I13a or a solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio: